### IN THE UNITED STATES DISTRICT COURT MIDDLE DISTRICT OF TENNESSEE NASHVILLE DIVISION

A. O. SMITH CORPORATION,	)	
GAYLORD ENTERTAINMENT COMPANY,	Ď	
OPRYLAND HOTEL NASHVILLE, LLC,	)	
GRAND OLE OPRY, LLC,	j	
GAYLORD PROGRAM SERVICES, INC.,	j	
OPRYLAND ATTRACTIONS, LLC,	)	
WILDHORSE SALOON ENTERTAINMENT VENTURES, INC.,	3	
OLH, G.P., and	)	
GAYLORD HOTELS, INC.,	)	
Plaintiffs,	No	_
v.		
UNITED STATES OF AMERICA,	{	
Defendant.	)	

### COMPLAINT

Plaintiffs, for their complaint against the Defendant, respectfully state as follows:

### NATURE OF THE CASE

- 1. Plaintiffs bring this action for just compensation against the United States of America for injuries, losses and damages to Plaintiffs' properties and businesses suffered as a result of the negligence and wrongful acts and omissions of the United States government and its agencies during the devastating May 2010 storm event in the Cumberland River Basin.
- 2. The May 2010 storm event should have been an endurable, natural event at or below the 100-year flood plain along the Nashville Reach of the Cumberland River. Instead, Defendant created a man-made flood above the 100-year flood plain. Neglecting to follow its own water control plans, manuals and reservoir instructions, and misapplying objective scientific data and engineering principles, Defendant failed to create and preserve storage capacity in Old

Hickory Reservoir on or before Saturday, May 1 in advance of the forecasted storm event. This failure allowed the waters of the Reservoir to rise to the very top of Old Hickory Dam on Sunday, May 2. Defendant's sudden release of those accumulated waters — to prevent the overtopping of the Dam and damage to the powerhouse — caused the Cumberland River to rise well above the 100-year flood plain and created a man-made disaster. Defendant knew or should have known that its actions would cause unprecedented flooding in the Nashville Reach above the 100-year flood plain but failed to warn of such danger.

- 3. Old Hickory Dam is a federal dam project located on the Cumberland River upstream from downtown Nashville. It was congressionally-authorized and funded as a hydroelectric power and navigation project, and not as a flood-control project. Through Old Hickory Dam, Defendant interrupts, manipulates and alters the natural flow of the Cumberland River for purposes of hydropower and navigation.
- 4. Defendant's negligence and wrongful acts and omissions prior to and during the May 2010 storm event, included, but was not limited to, miscalculating, misapplying, misjudging, and/or failing to utilize objective scientific data and engineering principles; failing to create and preserve storage capacity in Old Hickory Reservoir in advance of the storm; allowing too much head water to build up behind the Old Hickory Dam in advance of the storm; failing to recognize and respond to the magnitude of the storm event; failing to use and exchange proper data and using flawed data critical to Defendant's scientific and engineering duties; and releasing massive volumes of water into the Nashville Reach of the Cumberland River. As a result of Defendant's negligent and wrongful acts and omissions, waters that otherwise would have remained within the 100-year flood plain rose rapidly and created a man-made flood above the 100-year flood plain. Defendant then negligently failed to warn of the danger it had created.

- 5. This action arises under the Federal Tort Claims Act, 28 U.S.C. § 2671, et seq., based on the negligent and wrongful actions and omissions of employees of the United States government and its agencies, including the United States Army Corps of Engineers and the National Weather Service, while those employees were acting within the scope of their office or employment. Alternatively, this action arises under admiralty and maritime laws of the United States, 46 U.S.C. § 30101, et seq., 46 U.S.C. § 30901, et seq., 46 U.S.C. § 31101, et seq., and the general maritime laws of the United States.
- 6. The negligence and/or gross negligence of Defendant directly and proximately caused catastrophic destruction, damages, losses and other substantial harm to the real and personal property and business operations of Plaintiffs, which Plaintiffs would not otherwise have suffered as a result of the May 2010 storm event.

#### THE PARTIES

#### **Plaintiffs**

- 7. Plaintiff A. O. Smith Corporation ("A. O. Smith") is a Delaware corporation with its principal place of business located in Milwaukee, Wisconsin. A. O. Smith is one of the world's leading manufacturers of residential and commercial water heating equipment. A. O. Smith operates a large manufacturing facility and warehouse ("Ashland City Plant"), located at 500 Tennessee Waltz Parkway, Ashland City, Tennessee. The Ashland City Plant is located near the Cumberland River and suffered devastating damages during the May 2010 storm event. A. O. Smith is the parent corporation of State Industries, Inc.
- 8. Plaintiff Gaylord Entertainment Company is a Delaware corporation with its principal place of business located in Nashville, Tennessee. Gaylord Entertainment Company is engaged in the hospitality and entertainment business. Gaylord Entertainment Company,

directly or through affiliates, owns and operates hotel, resort, and entertainment and media companies, including Gaylord Opryland Resort and Convention Center (Opryland Hotel), the Grand Ole Opry, the General Jackson Showboat and Music City Queen Riverboat, the Gaylord Springs Golf Links, and the Wildhorse Saloon in Nashville, Tennessee. Gaylord Entertainment Company is the ultimate parent or holding company of Plaintiffs Opryland Hotel Nashville, LLC, Grand Ole Opry, LLC, Gaylord Program Services, Inc., Opryland Attractions, LLC, Wildhorse Saloon Entertainment Ventures, Inc., OLH, G.P., and Gaylord Hotels, Inc. (collectively referred to herein as "Gaylord").

- 9. Plaintiff Opryland Hotel Nashville, LLC is a Delaware limited liability company with its principal office located in Nashville, Tennessee. Opryland Hotel Nashville, LLC owns and operates the Opryland Resort and Convention Center located at Riverside Drive, Nashville, Tennessee, near the Cumberland River. The Opryland Hotel suffered devastating damages during the May 2010 storm event.
- 10. Plaintiff Grand Ole Opry, LLC is a Delaware limited liability company with its principal office located in Nashville, Tennessee. Grand Ole Opry, LLC owns and operates the Grand Ole Opry located at 2804 Opryland Drive, Nashville, Tennessee, near the Cumberland River. Grand Ole Opry, LLC previously owned buildings near the Cumberland River that were destroyed during the May 2010 storm event. The Grand Ole Opry, LLC suffered devastating damages during the May 2010 storm event.
- 11. Plaintiff Gaylord Program Services, Inc. is a Delaware corporation with its principal office located in Nashville, Tennessee. Gaylord Program Services owns entertainment media collections located at Riverside Drive, Nashville, Tennessee, near the Cumberland River.

The entertainment and media collections owned by Gaylord Program Services, Inc. suffered devastating damages during the May 2010 storm event.

- 12. Plaintiff Opryland Attractions, LLC is a Delaware limited liability company with its principal office located in Nashville, Tennessee. Opryland Attractions, LLC owns and operates the General Jackson Showboat and the Music City Queen Riverboat located at 2812 Opryland Drive, Nashville, Tennessee, near the Cumberland River. The General Jackson Showboat and Music City Queen Riverboat suffered devastating damages during the May 2010 storm event.
- 13. Plaintiff Wildhorse Saloon Entertainment Ventures, Inc. is a Tennessee corporation with its principal office located in Nashville, Tennessee. Wildhorse Saloon Entertainment Ventures, Inc. owns and operates the Wildhorse Saloon located at 120 Second Avenue North, Nashville, Tennessee, near the Cumberland River. The Wildhorse Saloon suffered devastating damages during the May 2010 storm event.
- 14. Plaintiff OLH, G.P. is a Tennessee general partnership with its principal office located in Nashville, Tennessee. OLH, G.P. owns and operates the Gaylord Springs Golf Links located at 18 Springhouse Lane, Nashville, Tennessee, near the Cumberland River. The Gaylord Springs Golf Links suffered devastating damages during the May 2010 storm event.
- 15. Plaintiff Gaylord Hotels, Inc. is a Delaware corporation with its principal office located in Nashville, Tennessee. Gaylord Hotels, Inc. previously owned and operated the Gaslight Theater formerly located at 2800 Opryland Drive, Nashville, Tennessee, near the Cumberland River that was destroyed during the May 2010 storm event.
- 16. Plaintiffs' properties and businesses that suffered damages during the May 2010 storm event are all located along the Nashville Reach of the Cumberland River above the 100-

year flood plain, which is 48 feet above the pool level of the Cumberland River at their properties.

#### Defendant

- 17. Defendant United States of America is a sovereign government subject to suit for civil liability in accordance with the Federal Tort Claims Act ("FTCA"), 28 U.S.C. § 2671, et seq., and/or admiralty and maritime laws, and/or the Constitution and Laws of the United States as alleged herein. Defendant is a proper defendant in this lawsuit for damages arising from the alleged negligent or wrongful actions or omissions of the United States government and its agencies, the Army Corps of Engineers and the National Weather Service.
- 18. The United States Army Corps of Engineers (the "Corps") is a division of the United States Government under the direct jurisdiction of the United States Department of the Army.
- 19. The National Weather Service ("NWS") is an agency of the United States government that is part of the National Oceanic and Atmospheric Administration, which is part of the United States Department of Commerce.

#### JURISDICTION AND VENUE

- 20. This court has subject matter jurisdiction of this matter against Defendant pursuant to 28 U.S.C. § 1331 (federal question) and 28 U.S.C. § 1346(b) (Defendant United States), as a lawsuit brought against the United States government under the FTCA.
- 21. Plaintiffs previously presented the Corps and the NWS with written administrative claims as required by the FTCA, 28 U.S.C. § 2671, et seq. Copies of Plaintiffs' FTCA Claims are attached hereto as Collective Exhibit A.
- 22. Plaintiffs have not yet received a determination of their Claims filed with the Corps and the NWS under the FTCA.

- 23. Plaintiffs have complied with the provisions of the FTCA and bring this action within the applicable time period, six (6) months having elapsed since the filing of each Plaintiff's administrative claims.
- 24. Alternatively, Plaintiffs assert admiralty and maritime jurisdiction and causes of action under the Admiralty Extension Act, 46 U.S.C. § 30101, et seq., the Suits in Admiralty Act, 46 U.S.C. § 30901, et seq., the Public Vessels Acts, 46 U.S.C. § 31101, et seq., and the general maritime laws of the United States.
- 25. Plaintiffs previously presented the Corps and the NWS with separate written administrative claims as required by 46 U.S.C. § 30101. Copies of Plaintiffs' Admiralty Claims are attached hereto as Collective Exhibit B.
- 26. Plaintiffs have not yet received a determination of their Claims filed with the Corps and NWS under the various admiralty and maritime laws.
- 27. Plaintiffs have complied with the provisions of the admiralty acts and maritime laws and bring this action within the applicable time period, six (6) months having elapsed since the filing of Plaintiffs' administrative claims and within two (2) years of the date on which Plaintiffs' damages were suffered.
- 28. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391 and 1402(b) because Defendant is the United States government, Plaintiffs reside in the Middle District of Tennessee, Defendant's negligent and wrongful actions or omissions occurred in whole or in part in the Middle District of Tennessee, and the damages suffered by Plaintiffs occurred within the Middle District of Tennessee.

#### WAIVER OF SOVEREIGN IMMUNITY

29. The sovereign immunity of Defendant is waived in connection with claims asserted against them in this suit by the enactment of the FTCA and/or under the admiralty acts and maritime laws.

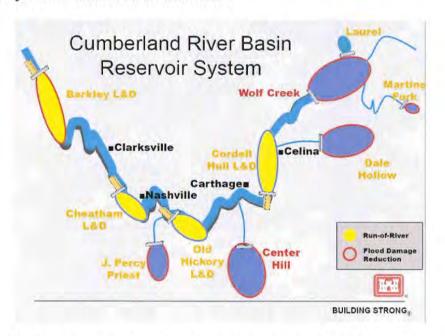
#### THE FACTS

#### The Cumberland River Basin

- 30. The Cumberland River is a crescent-shaped navigable waterway and tributary of the Ohio River that lies within the states of Kentucky and Tennessee. The Cumberland River generally flows east to west. The entire system is referenced as the Cumberland River Basin.
- 31. The Cumberland River flows through the city of Nashville, Davidson County, Tennessee, among other communities, and the portion that flows through Nashville is referred to herein as the "Nashville Reach."
- 32. Geographically, the city of Nashville sits within the Central Basin of the Cumberland River and is encircled by a geological formation called the Highland Rim. The Highland Rim rises east of Old Hickory Dam and west of Cheatham Dam.
- 33. The Central Basin is a depression or bowl in the topography of Middle Tennessee, the rim of which is the Highland Rim. The Central Basin forms a watershed, or drainage area, that directs runoff to the center of the Central Basin and into the Nashville Reach of the Cumberland River.
- More than 1 million people live within the Central Basin area of the Cumberland
  River.

#### The Federal Dam Projects on the Cumberland River

- 35. Congress authorized and funded ten federal dam projects to be located on the Cumberland River Basin System. The Corps implemented the congressional directives by designing, constructing, and operating the dam projects for the purposes specified in the authorizing legislation and project plans.
- 36. Five federal dam projects are located on the mainstem of the Cumberland River and five dam projects are located on its tributaries.



37. All five mainstem projects on the Cumberland River are congressionally authorized for power generation. These dam projects are designed and engineered by the Corps to impound and control or manipulate the natural flow of the waters of the Cumberland River.

Table I - Current Congressionally Authorized Project Purposes.

Project	Flood Risk Management	Commercial Navigation	Hydropower	Recreation	Water Quality	Fish & Wildlife
Mainstem Projects						
Wolf Creek Dam	X		X	X	X	X
Cordell Hull Lock & Dam		X	X	X	X	X
Old Hickory Lock & Dam		X	X	X	X	X
Cheatham Lock & Dam		X	X	X	X	X
Barkley Lock & Dam	X	X	X	X	X	X
Tributary Projects						
Martin's Fork Dam	X			X	X	X
Laurel Dam			X	X	X	X
Dale Hollow Dam	X		X	X	X	X
Center Hill Dam	X		X	X	X	X
J. Percy Priest Dam	X		X	X	X	X

- 38. Old Hickory Lock and Dam is one of the mainstem projects on the Cumberland River authorized by Congress in the Rivers and Harbor Act of 1946, Pub. L. No. 70-525. Old Hickory Dam sits at the eastern end of the Nashville Reach of the Cumberland River, approximately 24 river miles upstream from downtown Nashville.
- 39. Old Hickory Dam was congressionally authorized for hydropower and navigation. It was not authorized as a flood-control project and serves no congressionally-authorized flood-control purpose.
- 40. The Corps operates Old Hickory Dam and controls the flow of water through the Dam project and into the Nashville Reach. The Corps manipulates the water level and rate of flow (as measured by cubic feet per second or "cfs") through Old Hickory Dam generally on an hour-by-hour basis. Old Hickory Dam alters what otherwise would be the natural flow of the Cumberland River through Nashville.
- 41. Cheatham Dam is another federal dam project located on the mainstem of the Cumberland River and sits at the western end of the Nashville Reach. The Nashville Reach is, in

effect, an elongated man-made lake between Old Hickory Dam and Cheatham Dam, created by the impoundment of those two federal projects.

- 42. Cheatham Dam was congressionally-authorized for hydropower and navigation. It was not authorized as a flood-control project and serves no congressionally-authorized flood-control purposes.
- 43. In designing, constructing and operating the Cumberland River Basin projects, including Old Hickory Dam, the Corps developed and used basic flood estimates, one of which is called the "standard project flood."
- 44. The "standard project flood" can be defined as the largest flood that can be expected from the most severe combination of meteorological and hydrological conditions considered to be characteristic of a geographical region.
- 45. The "standard project flood" is based on the "standard project storm." The "standard project flood" can be defined as a hydrograph representing runoff from the standard project storm.
- 46. The "standard project storm" is defined as the "estimate for a particular drainage area and season of the year in which snow-melt is not a major consideration and should represent the most severe flood-producing rainfall depth-area-duration relationship and isohyetal pattern of any storm that is considered reasonably characteristic of the region in which the drainage basin is located." The term "storm" is used in a broad sense to mean any period or sequence of rainfall events that may contribute to critical flood events in the particular drainage basin.
  - A "standard project storm" is a foreseeable storm event.
- 48. On information and belief, Old Hickory Dam is classified as a "high hazard dam," meaning that the failure or mis-operation of the project probably will cause loss of human life.

#### The Corps' Management and Operation of the Dam Projects

- 49. The Corps' management and operation of the federal projects on the Cumberland River are governed by the projects' authorizing legislation, federal statutes and regulations, and Corps' water control plans and manuals and reservoir instructions for the projects mandated by and developed pursuant to 33 C.F.R. § 222.5 (the "Regulations").
- 50. The Regulations require the Corps to develop water control plans, water control manuals and instructions for reservoir regulation for reservoirs, locks, dams, reregulation and major control structures and interrelated systems to conform with objectives and specific provisions of authorizing legislation and applicable Corps reports. 33 C.F.R. § 222.5(f)(1). "Thorough analysis and testing studies will be made as necessary to establish the optimum water control plans within prevailing constraints." *Id.*
- 51. The Corps has developed a master water control plan, water control manuals, and instructions for reservoir regulation for projects on the Cumberland River Basin. These documents specifically govern the Corps' operation of the projects, including instructions on how to utilize the storage capacity at project reservoirs.
- 52. The Regulations require that the Corps establish adequate provisions "for collection, analysis and dissemination of basic data, the formulation of specific project regulation directives, and the performance of project regulation . . . at field level." 33 C.F.R. § 222.5(f)(5).
- 53. The Regulations require the Corps to make appropriate provisions "for monitoring project operations, formulating advisories to higher authorities, and disseminating information to others concerned. These actions are required to facilitate proper regulation of systems and to keep the public fully informed regarding all pertinent water control matters." 33 C.F.R. § 222.5(f)(6).

- 54. The Regulations require the Corps to develop "reservoir regulation schedules to assure that controlled releases minimize project impacts and do not jeopardize the safety of persons engaged in activities downstream of the facility. Water control plans will include provisions for issuing adequate warnings or otherwise alerting all affected interests to possible hazards from project regulation activities." 33 C.F.R. § 222.5(f)(7).
- 55. The Regulations require that the water plans and manuals "will be revised as necessary to conform with changing requirements resulting from developments in the project area and downstream, improvements in technology, new legislation and other relevant factors." 33 C.F.R. § 222.5(f)(3).
- 56. The Regulations require the Corps to include in each water control manual "a section on special regulations to be conducted during emergency situations, including droughts. Preplanned operations and coordination are essential to effective relief or assistance." 33 C.F.R. § 222.5(i)(5).
- 57. In developing water control plans and instruction manuals, and in making decisions regarding the operation of dam projects, Defendant relies on computer runs of streamflow synthesis and reservoir regulation that simulate both natural and man-made effects as the primary source of data on which to base the scheduling and control of project operations.
- 58. For each project on the Cumberland River, the Corps' manuals and instructions define three horizontal zones or pools in the lake reservoir created behind the dam. From the bottom of the lake to the top, the zones are (1) the inactive pool, (2) the power pool, and (3) the surcharge pool.

- 59. The inactive pool, or bottom storage zone, offsets lake sedimentation and provides head for hydropower. It also provides depth for slack water navigation, recreation, water intake, habitat for fish and wildlife, and insurance for drought periods.
- 60. The power pool, or middle storage zone, is the storage capacity of the reservoir used for daily hydropower generation at the project, which is sold to the Tennessee Valley Authority. It is the level of the reservoir during periods of "Normal Regulation," as provided in the Corps' water control manuals and instructions for reservoir regulation.
- 61. The surcharge pool, or uppermost zone, is the storage capacity of the reservoir that is used to mitigate the effects of the reservoir on downstream river crests. It is intended to store the quantity of water that under natural conditions would have been stored in the former river valley, but which natural storage was lost due to the impoundment from the project. The surcharge pool is used during periods of "Flood Regulation," pursuant to the Corps' water control manuals and instructions for reservoir regulation.

#### Old Hickory Dam

- 62. The power pool at Old Hickory Reservoir extends from the elevation of 442 to 445 feet above sea level. There are 63,000 acre feet of storage capacity in the power pool at Old Hickory Reservoir between the elevations of 442 and 445 feet. To enhance recreation, the power pool is maintained in the upper one foot of the power pool, or between the elevations of 444 and 445 feet.
- 63. The surcharge pool at Old Hickory Reservoir extends from the elevation of 445 to 450 feet above sea level. There are 125,000 acre feet of storage capacity in the surcharge pool at Old Hickory Reservoir between the elevations of 445 and 450 feet. The surcharge pool is

designed to mitigate the natural valley storage area along the Cumberland River lost due to the impoundment from Old Hickory Dam.

- 64. The Corps' "Old Hickory Dam Instructions for Reservoir Regulation" define three types or periods of regulation of the reservoir: Normal Regulation, Flood Regulation, and Drought Regulation.
- 65. During periods of "Normal Regulation" at Old Hickory Reservoir, the water level elevation of the reservoir is maintained within the power pool, or between 442 and 445 feet above sea level. The power pool is used to generate hydropower, provide for navigation and enhance recreation.
- 66. During periods of "Flood Regulation" at Old Hickory, pre-flood drawdown to elevation 442 (the power pool level) is permitted upon direction from the Corps' Water Management. Pre-flood drawdown to 442 feet creates at least 188,000 acre feet of storage capacity in Old Hickory Reservoir.
- 67. All other operating objectives of the Cumberland River projects, including hydropower, become secondary considerations during periods of "Flood Regulation."
- 68. The "Flood Regulation" Instructions for Old Hickory Reservoir further provide that surcharge pool storage should not be used until "just prior to the peak of the flood to maximize reduction of the peak outflow from the project. . . . If the flood surcharge storage is used too soon, there could be no storage space remaining when the peak arrives." "Thus, the surcharge storage and any additional storage that can be gained by pre-flood drawdown should be preserved until it is clearly evident that the storm has passed."
- 69. Accordingly, to utilize the additional storage capacity of Old Hickory Reservoir within the power pool and prevent excessive and potentially damaging discharges, it is necessary

for the Corps to release water through Old Hickory Dam into the Nashville Reach in advance of predicted heavy rainfall. To preserve that storage capacity, it is necessary for the Corps to discharge from Old Hickory Dam at least as much water as is flowing into Old Hickory Reservoir until just prior to the peak of the flood. Defendant knew that the peak of the flood occurs after the rains stop as it takes time for the runoff to drain from the Central Basin into the Cumberland River.

- 70. The water control manuals and instructions for Old Hickory Dam and Reservoir provide the following safety mandate: "Maintaining the integrity of the structure under all conditions of streamflow, and assuring the safety of the general public both at the project and in the river system below the project takes precedence over all functional requirements. The project design and this water control plan are intended to result in safe conditions for all anticipated circumstances. If however, conditions arise where adherence to this plan would jeopardize structural integrity or the general public, safety conditions should prevail."
- Corps engineering regulations require the creation of an Emergency Action Plan
  ("EAP") for every Corps operated dam.
- 72. As described in the engineering regulation, an EAP "is a formal document that identifies potential emergency conditions (either dam failure or large spillway releases) at a dam and specifies preplanned actions to be followed in order to minimize property damage and loss of life."
  - 73. On information and belief, the Corps has an EAP for Old Hickory Dam.

#### The National Weather Service

- 74. The NWS develops and publishes NWS products and services, including public weather forecasts and warnings and hydrologic forecasts and warnings, such as river flows, river stage predictions, and observed river stage levels.
- 75. The NWS Hydrometeorological Prediction Center ("HPC") provides products and services, including forecasts, guidance, and analysis to support the daily public forecasting activities of the NWS. Through the HPC, the NWS publishes quantitative precipitation forecasts twice each day in the early morning and late afternoon or evening.
- 76. The NWS has thirteen River Forecast Centers with expertise for hydrologic forecasting. The NWS River Forecast Centers evaluate and use the NWS' quantitative precipitation forecasts to prepare the NWS' river stage forecasts.
- 77. The NWS River Forecast Centers provide river stage forecasts to the NWS local Weather Forecast Offices. The NWS' local Weather Forecast Offices disseminate the river stage forecasts to other government agencies and the public. NWS forecasters use the river stage forecasts to issue weather advisories, flood watches, and flood warnings for locations within their area of responsibility.

## Interagency Relationship of the Corps and National Weather Service

- 78. The respective duties of the Corps and the NWS are interrelated and complementary, requiring the collection, coordination and exchange of scientific, hydrological and meteorological information and data.
- 79. In carrying out water control activities, the Regulations require the Corps to "recognize and observe the legal responsibility of the National Weather Service (NWS), National Oceanic and Atmospheric Administration (NOAA), for issuing weather forecasts and flood

warnings, including river discharges and stages. River forecasts prepared by the Corps of Engineers in the execution of its responsibilities should not be released to the general public, unless the NWS is willing to make the release or agrees to such dissemination. However, release to interested parties of factual information on current storms or river conditions and properly quoted NWS forecasts is permissible. District offices are encouraged to provide assistance to communities and individuals regarding the impact of forecasted floods." 33 C.F.R. § 222.5(f)(8).

- 80. In recognition of the interrelatedness of the missions and duties of the Corps and the NWS and the need to coordinate and cooperate with each other in the collection and analyses of meteorological and hydrological data and information, the Corps and the NWS entered into a Memorandum of Agreement in 1991. A copy of the 1991 Memorandum of Agreement is attached hereto as **Exhibit C.**
- 81. The 1991 Agreement requires the Corps and NWS to exchange meteorological and hydrological data and information.
- 82. The 1991 Agreement requires both the Corps and the NWS to make river flow forecasts: "the NWS for dissemination of forecasts to the public and to their Federal, state, and local cooperators; and the [Corps] for the management of reservoirs, locks and dams and other water control facilities. Information and 'real-time data' exchange is to occur regionally between the Corps' districts and divisions and NWS River Forecast Center/Weather Forecast Offices, usually through their respective computer systems."
- 83. Both the NWS and the Corps generate river stage forecasts utilizing computer programs that calculate how rainfall inundates the topography of the Cumberland River Basin.

- 84. The Corps produces daily reports detailing the latest observed and 5-day forecasted releases (outflows) for each dam project it operates on the Cumberland River. The Corps electronically transmits that information and data each day to the NWS.
- 85. In April and May 2010, the Corps' daily reports of projected releases from each dam project were based on observed, or actual, rainfall that occurred during the past 24-hour period, or "rain on the ground," as of 6:00 a.m. each day. The Corps' daily reports of projected releases did not account for forecasted precipitation for that same day.
- 86. The NWS uses the daily reports received from the Corps to forecast stream flow and river stages for the Cumberland River.
- 87. Prior to and at the time of the May 2010 storm event, NWS did not know that the Corps' daily reports were limited to observed or actual rainfall that had occurred during the past 24-hour period, or "rain on the ground," and that the reports did not include or account for the expected runoff of rain waters from the forecasted precipitation during the next 24-hour period.
- 88. During major storm events, an intensive interagency effort between the NWS and the Corps is necessary to forecast river stage levels and respond to catastrophic conditions and impacts.
- 89. During periods of flooding on the Cumberland River system, the Corps Nashville District Water Management is required to "maintain close contact" with the Corps Ohio River Division Water Management, the NWS Ohio River Forecast Center, and the NWS Service Hydrologists to "keep all informed as to flood control strategy."

## The Role of the United States Geological Survey

90. The United States Geological Survey ("USGS") is a federal agency within the Department of Interior that is responsible for providing reliable scientific data and research. The

USGS collects and disseminates hydrological data and information, among other activities, and is a resource for other government agencies. Such hydrological data and information from the USGS is critical to the hydrological forecasts of the NWS (for dissemination of official reports) and Corps (for the management of the Corps' reservoirs).

- 91. During times of flooding, the Water Science Centers of the USGS maintain a comprehensive network of stream and precipitation gages. The USGS has the ability to collect real-time data and gage information.
- 92. In 1940, the Corps and USGS established a Cooperative Gaging Program to provide for effective funding, operation and maintenance of gages vital to the Corps' reservoirs and water control management.
- 93. The Corps Nashville District withdrew from the Cooperative Gaging Program with the USGS approximately five years ago and ended its direct working relationship with the USGS. The Corps contracted with a third party for gage maintenance for the Cumberland River Basin in 2005, which contract expired on April 30, 2010.
- 94. During the May 2010 storm event, Defendant never contacted the USGS to obtain real-time data and gage information.

## The May 2010 Storm Event

- 95. The Cumberland River Basin experienced heavy rainfall on Saturday, May 1 and Sunday, May 2, 2010, with successive rounds of intense rain storm activity.
- 96. The weather system that brought heavy rainfall to the Cumberland River Basin was predicted for days in advance of the rain that fell on Saturday, May 1 and Sunday, May 2.
- 97. The "stage" level of the Cumberland River in Nashville is the elevation of the Nashville Reach. It rises as more water is discharged through Old Hickory Dam.

- 98. "Minor flood stage" for Nashville is established at 40 feet (or approximately 408 feet above sea level at Nashville and almost 8 feet below the 100-year flood plain). This level corresponds to a discharge flow rate through Old Hickory Dam of approximately 110,000 cfs.
- 99. "Major flood stage" for Nashville is established at 45 feet (or approximately 413 feet above sea level at Nashville and almost 3 feet below the 100-year flood plain).

### April 24, 2010 - Storms Before the May 2010 Storm Event

- 100. Almost one week prior to the May 2010 storm event, a different weather system moved through the Cumberland River Basin on April 24 and brought widespread rainfall amounts of 1 to 3 inches. As a result of the discharge of water from the April 24 rains through Old Hickory Dam, the river stage level at the downtown Nashville gage of the Cumberland River rose 1.7 feet.
- 101. The April 24 rains saturated the ground in the Central Basin of the Cumberland River, increasing soil moisture and stream flows and thereby increasing the likelihood that a subsequent rainfall in the same area would result in significant runoff of rain waters into the mainstem of the Cumberland River.
- 102. Prior to the May 2010 storm event, the Corps neglected to maintain the spillway gates at Old Hickory in good repair and operating condition. One spillway gate was out of service due to scheduled maintenance, during one of the rainiest months of the year, and one turbine was unavailable due to an unscheduled outage, which prevented their usage during the May 2010 rain event.

## April 27-30, 2010 - The Developing Storm System

103. On Tuesday, April 27, 2010 the Corps and the NWS noted that there was a significant rainfall event predicted to begin in the Cumberland River Basin on Friday, April 30.

- 104. A powerful storm system had moved ashore from the Pacific Northwest and maintained its strength as it continued moving across the Rocky Mountains on Wednesday, April 28 and Thursday, April 29. The same storm system continued moving into the central United States on Friday, April 30. Defendant tracked the development and progress of the storm system as it headed toward Middle Tennessee.
- 105. On Wednesday, April 28 the Corps noted the magnitude of the storm system that was headed toward the Cumberland River Basin and began monitoring the storm. The NWS issued a 5-day quantitative precipitation forecast showing a storm system with rainfall of up to 6.2 inches.
- 106. On Thursday, April 29, the NWS issued an updated 5-day quantitative precipitation forecast showing a storm system with rainfall of up to 6.6 inches, and was forecasting "two-to-three distinct rounds of showers and thunderstorms" over the weekend for the Cumberland River Basin.
- 107. The Corps lowered the pool elevation of Old Hickory Reservoir by only approximately 0.5 foot on Thursday, April 29.
- 108. By Thursday, April 29, the Corps noted that the "axis of heaviest rainfall at this time is expected from Northern Mississippi through Tennessee into south central Kentucky," stretching across the Central Basin.
- 109. The Corps Ohio River Division issued a "Flood Potential Update," via electronic mail, that a significant event was forecasted. However, the electronic mail message transmitting this Flood Potential Update was not read by other Corps personnel. The Corps failed to implement a mechanism at the Corps Ohio River Division to activate the staff into emergency mode.

- 110. On Thursday, April 29, despite the anticipated and successive rounds of heavy rainfall predicted for Saturday, May 1 and Sunday, May 2, with a forecast of up to 6.6 inches of rainfall, the Corps continued to operate its "business as usual." The Corps continued to implement "Normal Regulations," continued to generate hydropower, and continued to maintain the power pool for navigation and to enhance recreation.
- 111. By Friday, April 30, the Corps and NWS knew that a relatively rare convergence of conditions that was favorable for prolonged intense rainfall in Tennessee was developing. As of April 30, (i) there was an unseasonably strong late-spring storm system that had been tracking across the United States from west to east as it headed toward Middle Tennessee, (ii) there was a stationary upper air pattern that would concentrate the storm in a relatively defined geographic area, (iii) there was a persistent tropical moisture feed drawing water northward into the storm system from the Gulf of Mexico, and (iv) there were impulses moving through the jet stream consistent with a strong storm system.
- 112. The four factors described above combined to generate a prolonged rainfall event in the Cumberland River Basin, with the most intense storm activity occurring on Saturday, May 1 and Sunday, May 2.
- 113. By the morning of Friday, April 30, Defendant knew that there was a significant risk that there would be heavy rainfall in the Central Basin watershed areas of the Cumberland River Basin and its management of Old Hickory Reservoir in advance of a massive storm system could either minimize the impact of incoming rainfall or exacerbate the impact and cause excessive flooding.

- 114. On Friday, April 30, the NWS issued a quantitative precipitation forecast showing increased predicted rainfall totals of up to 7 inches with a high rainfall amount of 7.8 inches in Middle Tennessee.
- 115. The Corps did not lower Old Hickory Reservoir in response to Friday's forecasted rainfall.
- 116. Despite the increased forecast, Defendant maintained Old Hickory Reservoir in a "business as usual" manner, holding the water level at approximately 444.5 feet, a mere six inches from the top of the power pool in the optimal range for hydropower, navigation and recreation.
- 117. By Friday, April 30, the Corps and NWS knew that successive rounds of heavy rains falling in the Central Basin would result in heavy storm runoff into the mainstem of the Cumberland River.
- 118. Despite Defendant's knowledge of the forecasted rainfall, the Corps did not implement "Flood Regulation" Instructions or release water through the spillway gates of Old Hickory Dam in order to create and preserve the necessary storage volume prior to the storm. Instead, the Corps continued to operate its "business as usual." The Corps continued to implement "Normal Regulations," continued to generate hydropower, and continued to maintain the power pool for navigation and to enhance recreation.

## Saturday, May 1, 2010 - Day One of the Storm Event

119. By Saturday morning, May 1, 2010, there was a stalled upper air pattern and frontal boundary of thunderstorm activity, which concentrated the storm system over the Cumberland River Valley.

- 120. At 4:35 a.m. on Saturday, May 1, the NWS Hydrometeorological Prediction Center issued a forecast for a record-breaking two-day rainfall event for Middle Tennessee.
- 121. On Saturday morning, May 1, as heavy rain began falling, the NWS issued a revised quantitative precipitation forecast increasing the rainfall totals up to 8 to 8.6 inches in Middle Tennessee. The rainfall forecasted for this single storm event was already nearly twice the average monthly rainfall amount for the entire month of April.
- 122. The Corps did not lower Old Hickory Reservoir in response to Saturday's forecasted rainfall.
- 123. Rains of more than 8 inches in a 24 to 48-hour period are rare, a one in 200-year event. Defendant, however, never lowered the Old Hickory Reservoir to create more storage capacity after April 29, 2010. Instead, the reservoir steadily rose through the day on Saturday, May 1, rising through the top of the power pool and into the surcharge pool, well before the second day of the record-breaking two-day storm event.
- 124. The first round of intense thunderstorms on Saturday, May 1, produced five to eight inches of rain across central and eastern Tennessee, including the Central Basin of the Cumberland River.
- 125. Even as the rains fell, the Corps continued to operate Old Hickory Reservoir under Normal Regulation, continued to generate hydropower, and maintained the power pool in the upper one foot area of the power pool, the level used to enhance recreation.
- 126. Notwithstanding its duty to do so, the Corps did not send any daily reports of projected releases to the NWS on either Saturday, May 1 or Sunday, May 2, the two most critical days of the storm event.

- 127. Notwithstanding the fact that the Corps did not send and the NWS did not receive daily reports from the Corps regarding observed and forecasted dam releases on Saturday, May 1, the NWS issued official river stage forecasts for the Cumberland River, including Nashville, based on the data received the prior day. The NWS ran its river stage forecast models, but used day-old information and data provided by the Corps that the NWS knew was not current as the main input for the NWS forecast models. Moreover, as described above, the data provided by the Corps on which the NWS relied failed to include expected runoff of rain waters from the precipitation for the remainder of the day on Saturday, May 1, or the expected rainfall on Sunday, May 2. As a result, the NWS river stage forecasts for the Cumberland River underestimated the river stage levels and forecasted only minimal rises in the Cumberland River stage levels during the rest of the weekend. The NWS forecasted river stages were substantially below the actual or observed rises in the Cumberland River.
- 128. On Saturday morning May 1, the NWS Ohio River Forecast Center initiated 24-hour staffing based on the magnitude of the storm event. Although certain specified staffing levels were required of NWS during the May 2010 storm event, the NWS failed to have adequately trained staff on-site during all of the event.
- 129. The Corps Nashville District did not initiate similar 24-hour staffing at that time and did not increase its weekend day and evening staffing. In fact, the Corps Nashville District was minimally staffed on Saturday, May 1 and Sunday, May 2 because those days fell over a weekend instead of a regular work week, notwithstanding the forecast of a major storm event.
- 130. On Saturday morning, May 1, the NWS Ohio River Forecast Center issued its river stage forecast and sent the results of its Meteorological Model-Based Ensemble Forecast

System (MMEFS) via electronic mail message to the NWS Nashville Weather Forecast Office and the Corps Nashville District office, stating:

Please take the attached (MMEFS) results seriously. The model trends have been consistent. We are looking at significant potential for Major Flooding. The [NWS Ohio River Forecast Center] will be staffed 24-hrs from now through Monday morning, with increased weekend day and evening staffing as well.

- 131. Notwithstanding the data and forecasted information received by the Corps on May 1, and the evident danger to people and property downstream from Old Hickory Dam, the Corps took no action to confirm or deny the accuracy of this dire forecast and did not lower the level of, and create additional storage capacity in, Old Hickory Reservoir.
- 132. By mid-day on Saturday, May 1, the NWS issued an "Excessive Rainfall Potential Outlook" and expressed concern about much greater totals for the area noting as follows:

WIDESPREAD STORM TOTAL AMTS IN EXCESS OF 8.0 INCHES ARE LIKELY . . . SOME VERY LOCALIZED AREAS HAVE ALREADY EXCEEDED THAT AND WOULD NOT BE SURPRISED TO SEE STORM TOTAL AMTS APCH AND/OR EXCEEDING 12 – 15 INCHES OVER SOME SPOTS.

- discharges from Old Hickory Dam in response to the heavy rains and runoff into the Cumberland River and the rising reservoir level behind the dam. The total releases at Old Hickory Dam (consisting of turbine discharges plus spillway gate releases) increased from 24,300 cfs at noon to 74,500 cfs by midnight on Saturday, May 1. These releases were still less than the stormwater runoff entering Old Hickory Reservoir. As a result, the level of Old Hickory Reservoir rose and it lost needed storage capacity even while Defendant was predicting a second round of intense storm activity with a significant potential for major flooding.
- 134. The Corps did not notify the NWS of these increases in water discharges from Old Hickory Dam.

- 135. At 1:00 p.m. on Saturday, May 1, the Corps' Nashville District Commander declared a flood emergency.
- 136. At 1:40 p.m. on Saturday, May 1, the Corps' Water Manager at the Nashville District left the office, only forty minutes after the flood emergency was declared and in the midst of the storm.
- 137. Corps' water management staff came on duty at the Nashville District at 7:00 p.m. and left at 11:00 p.m. Between the time the Water Manager had left at 1:40 p.m. and water management staff returned at 7:00 p.m., the Old Hickory Reservoir had risen by more than one foot. By 11:00 p.m., the Nashville Reach of the Cumberland River rose 12 feet.
- 138. Although it stopped raining for a period of time on Saturday afternoon, May 1, runoff from Saturday's rains predictably continued to flow into the Old Hickory Reservoir. The volume of inflows into the reservoir exceeded the outflow released through Old Hickory Dam, with the result that the reservoir elevation continued to rise throughout the day and night on Saturday, May 1.
- 139. When the Corps finally began increasing the discharges at Old Hickory Dam as the reservoir level rose on Saturday, May 1, the Corps had to increase the discharges rapidly because of its delay. The rapid increases in discharges caused the observed rises in the level of the Cumberland River at Nashville to "far outpace" the NWS river stage forecasts throughout the afternoon and night on Saturday, May 1.
- 140. From Saturday night, May 1 to Sunday morning, May 2, the NWS Ohio River Forecast Center attempted to contact the Corps Nashville District office several times to obtain updated discharge information and data on the Cumberland River projects. The NWS' calls went unanswered because the Corps Nashville District office failed and neglected to have

personnel on-site throughout the night on Saturday, a critical period of time during the May 2010 storm event.

141. As a result of the Corps' negligent failure to react to the forecasted storm event and to effectively create, preserve, and use the storage capacity of Old Hickory Reservoir prior to the start of the May 2010 storm event, as required by the Water Control Manuals and Instructions for Reservoir Regulation, the Corps did not have sufficient storage capacity on Sunday, May 2 to accommodate the inflows into the Old Hickory Reservoir from the runoff of Saturday's rainfall and the rainfall forecasted for Sunday in the Cumberland River Basin.

#### Sunday, May 2, 2010 - Day Two of the Storm Event

- 142. On Sunday, May 2, 2010, a second round of intense thunderstorms occurred across the same area as the first round and produced additional rainfall of up to 8 inches.
- 143. By 6:00 a.m. on Sunday, May 2 and with no overnight water management staff on duty at the Corps Nashville District, the Corps allowed the Old Hickory Reservoir to rise to 447.75 feet above sea level, using almost three feet of the storage capacity of the surcharge pool before the second round of heavy rainfall had arrived and well before the peak of the flood that would result from rainfall runoff draining into the Central Basin of the Cumberland River.
- 144. At 7:15 a.m. on Sunday, May 2 as the second day of heavy rains began to fall, the NWS Ohio River Forecast Center contacted the Corps' Ohio River Division to ask for updated project release data and projections for releases at the Cumberland River projects. NWS was told by the Corps' Ohio River Division that the Nashville District staff would be in around 7:30 a.m.

- 145. At around 8:30 a.m. on Sunday, May 2 after Corps staff arrived at the Nashville District office, the Corps Ohio River Division facilitated a telephone call between the NWS Ohio River Forecast Center and the Corps Nashville District office.
- 146. During that conference call, the NWS and the Corps discussed the forecasted rainfall amounts, the current and forecasted water releases from the Cumberland River projects, and the results of Defendant's forecast model simulations, and the divergence between two different river stage projections for the Cumberland River.
- 147. One of Defendant's river stage model simulations, using NWS computer-generated projections of releases from the Old Hickory Dam rather than the Corps' daily reports of projected releases from the Old Hickory Dam, projected a river stage of approximately 54 feet for the Cumberland River at Nashville. A river crest stage of 54 feet (about 422 feet above sea level at Nashville) for the Cumberland River at Nashville equates to a risk of extreme flooding (e.g., the 500-year stage level is about 421 feet above sea level). A second forecast model simulation that used Corps daily reports of projected releases from the Old Hickory Dam, however, projected a river stage of approximately 41.9 feet (about 410 feet above sea level at Nashville).
- 148. The NWS and the Corps discussed these crucial discrepancies in the river stage model simulations during the conference call, but those discrepancies were left unresolved.
- 149. Notwithstanding Defendant's knowledge that one of its computer forecast models had projected a river crest of 54 feet for the Cumberland River at Nashville that would cause devastating damages, the NWS issued an updated official river stage forecast that was released to the public at 9:39 a.m. on Sunday, with a projected river crest of 41.9 feet at 7:00 p.m. for

Nashville. The NWS river stage forecast of 41.9 feet was just below "moderate flooding" of 42 feet for the Nashville gage and 3.1 feet below the major flooding level of 45 feet.

- 150. Defendant knew that a river crest of 54 feet for the Cumberland River at Nashville would pose a serious threat of loss of life and the danger of inordinate property damage.
- 151. At the time the NWS issued its forecasted river crest of 41.9 feet for Nashville, the second round of heavy rains had begun falling on Sunday morning and the Cumberland River at Nashville was already at 40 feet. Additional heavy rains were predicted during the day on Sunday.
- 152. At 10:00 a.m. on Sunday, the Corps stated that it could maintain discharges from Old Hickory at 100,000 cfs, which would have kept the waters in the Nashville Reach from rising above the 100-year flood plain. Defendant was wrong.
- 153. A mere 21 minutes after the NWS released its official forecast of a river crest of 41.9 feet, the Corps again dramatically increased the discharges at Old Hickory Dam because of the rapidly rising reservoir level from the heavy Sunday morning rains. The Corps increased the volume of water released at Old Hickory Dam from 80,300 cfs at 10:00 a.m. to 123,600 cfs by 1:00 p.m.
- 154. Releasing such massive amounts of water in the Cumberland River through the Old Hickory Dam between 10:00 a.m. and 1:00 p.m. created a surge of water that caused the Cumberland River to rise quickly and far outpace the NWS forecast. In fact, the NWS' forecasted crest of 41.9 feet to occur at 7:00 p.m. on Sunday, May 2 was already exceeded by 11:30 a.m., less than two hours after the official forecast had been issued.

- 155. The Corps Nashville District office failed to contact the NWS to inform the NWS of the huge increases in discharges through Old Hickory Dam, which would have allowed the NWS to revise its forecasted river stage at Nashville and inform the public.
- 156. At 11:18 a.m. on Sunday, May 2, the NWS issued a revised forecasted river crest at Nashville of 45.0 feet, or Major Flood Level, to occur at 7:00 p.m. that evening.
- 157. By noon on Sunday, May 2, in breach of the Corps' duty to preserve the surcharge pool for the peak of the flood, the surcharge pool became full, even as the second round of heavy rains continued to fall and the runoff from those rains flowed into the Central Basin of the Cumberland River.
- 158. During an extended and critical period of time on Sunday, May 2, from 9:50 a.m. to 8:05 p.m., the Corps Nashville District office lost its internet connectivity due to a break in its internet cable. The Corps failed to have adequate emergency, redundant or back-up internet communications equipment, systems or plans in place. The Corps Nashville District office lost the ability to communicate crucial data and information timely and effectively with other Corps' offices, the NWS, and others regarding rapidly increasing discharges from Old Hickory Dam.
- 159. Prior to the storm event, the Corps had neglected to train personnel and provide necessary authorizations to use the Corps computer software program for emergency operations, called "ENGLink."
- 160. At 1:30 p.m. on Sunday, May 2, the Corps' Ohio River Division facilitated a telephone conference call between NWS Ohio River Forecast Center and the Corps Nashville District office. The Corps Nashville District office advised the NWS that the discharges at Old Hickory would be increased to 130,000 cfs and possibly up to 140,000 cfs by 2:00 p.m.

Inexplicably, the NWS and Corps made no plans to increase the frequency of their communications despite the Corps' network outage and the escalating flood emergency.

- 161. Shortly after the 1:30 p.m. conference call, the Corps began even more aggressive increases in the volume of water discharged from Old Hickory Dam, as often as every 15 minutes. Again, the Corps failed to notify the NWS about these significant increases.
- 162. By noon on Sunday, May 2, the Corps had allowed Old Hickory Reservoir to rise to the top of the surcharge pool, robbing the reservoir of any remaining storage capacity well before the peak of the flood and necessitating much larger releases than otherwise would have been necessary.
- 163. Having failed on Saturday, May 1 and before to create storage capacity necessitated by the forecast of more than 8 inches of rain, the Corps had no remaining storage capacity at Old Hickory Reservoir and was left with no choice other than to increase the discharges even further on Sunday, May 2 from 130,300 cfs at 2:00 p.m. to an unprecedented 212,260 cfs by 6:00 p.m. Despite the Corps' conclusion only four hours earlier that the discharges at Old Hickory Dam would not exceed 100,000 cfs, the Corps began releasing much larger volumes of water for which there should have been storage capacity, thereby causing Plaintiffs' damages.
- 164. Notwithstanding the Corps' dramatic and unprecedented increases in the volume of water being dumped into the Nashville Reach of the Cumberland River, the Corps and NWS both failed to provide updates on the Cumberland River stage forecast for Nashville until 3:37 p.m.

- 165. By 4:00 p.m. on Sunday, May 2 with the surge from the greatly increased volumes of water being dumped into the Nashville Reach by the Corps, the Cumberland River exceeded "major flood" stage level of 45 feet.
- 166. At 4:19 p.m. on Sunday, May 2, the NWS issued an updated forecasted river crest at Nashville of 48 feet (approximately equal to the 100-year flood plain of 416 feet above sea level) for Monday, May 3 at 1:00 a.m.
- 167. At 4:43 p.m. on Sunday, May 2, the NWS Weather Forecast Office at Nashville phoned the Corps' Nashville District office to ask about updated releases. The Corps gave the NWS erroneous release data of 150,000 cfs, when the actual water release data at that time exceeded 200,000 cfs.
- 168. At 7:50 p.m. on Sunday, May 2, the NWS Weather Forecast Office at Nashville again phoned the Corps Nashville District office, and the Corps again provided incorrect discharge data that was based on outdated estimated releases, not actual releases, as of that time.
- 169. The NWS Weather Forecast Office at Nashville, NWS Ohio River Forecast Center, and forecasters received and used the incorrect discharge data provided by the Corps until around 11:00 p.m. on Sunday, May 2.
- 170. As a result of the using erroneous and flawed data, the observed rises in the Cumberland River at Nashville continued to far outpace the NWS' forecasted rises and forecasted river crest of 48 feet.
- 171. Because the Corps failed by Saturday, May 1 to create and preserve storage capacity, the Reservoir rose to the top of the lock walls by noon on Sunday, May 2 and Old Hickory Dam was in danger of being overtopped. At that point, and to prevent overtopping of the dam and extensive damages to the dam's powerhouse, the Corps was forced to increase

continually and dramatically the discharges at Old Hickory Dam until they reached a peak of 212,260 cfs at 6:00 p.m. on Sunday evening.

- 172. Lacking the storage capacity that should have been created in response to the forecasted historic storm event, the Corps' uncontrolled releases of massive amounts of water into the Nashville Reach of the Cumberland River on Sunday, May 2 caused the river to rise above the 100-year flood plain, causing inordinate damage to property owners along the Nashville Reach.
- 173. After the rains subsided, the Cumberland River at Nashville crested at 51.86 feet on Monday, May 3 at approximately 6:00 p.m., inundating the lands all along the Nashville Reach of the Cumberland River.
- 174. Even with a river crest of 51.86 feet (about 419.96 feet above sea level) at Nashville, the May 2010 storms were foreseeable and within Defendant's "standard project flood" design for the Cumberland River Basin system.
- 175. Defendant's releases of massive volumes of waters through Old Hickory Dam were necessitated by Defendant's failure to implement on or before Saturday, May 1 appropriate measures to prepare for the forecasted storm event. As a direct and proximate result of Defendant's negligent acts and omissions, the river stage of the Nashville Reach rose well above the 100-year flood plain, causing extensive damages to Plaintiffs' properties.

#### Defendant's Breaches of Duties

# Negligent Operations and Water Management of Old Hickory Dam and Reservoir

176. Having constructed Old Hickory Dam on the Cumberland River, Defendant has a duty to proceed with due care in the management and operation of the Dam and Reservoir.

- 177. Based upon the predicted path and severity of the storm system leading up to the May 2010 storm event, Defendant knew or should have known that significant amounts of rainfall from the storm system would occur in the Central Basin watershed area, with unchecked tributary flow into the Nashville Reach of the Cumberland River.
- 178. Defendant knew or should have known that the heavy rainfall in the Central Basin would quickly flow downhill from the Highland Rim to the bottom of the Central Basin and into the Nashville Reach, the area of the Cumberland River with the densest population and highest concentration of buildings and structures.
- 179. Defendant knew or should have known that in order to protect the people and property downstream from Old Hickory Dam, it needed to create and preserve storage capacity in Old Hickory Reservoir in advance of the peak of the flood.
- 180. Defendant knew or should have known that if the storage capacity of Old Hickory Reservoir were utilized or filled too soon and prior to the peak of the flood, there would not be sufficient storage capacity remaining when the peak water levels were reached.
- 181. Defendant knew or should have known that the failure to create storage capacity in Old Hickory Reservoir, followed by sudden and excessive discharges from Old Hickory Dam to prevent overtopping of the Dam, would cause the Nashville Reach of the Cumberland River to rise above the 100-year flood plain endangering lives and inundating Plaintiffs' property, buildings and structures located above the 100-year flood plain.
- 182. Plaintiffs relied upon Defendant to provide information regarding the flow of the waters of the Cumberland River, including but not limited to, information regarding river stage forecasts.

- 183. Defendant's negligence in failing to control discharges at Old Hickory Dam to maintain the river stage level of the Nashville Reach at or below the 100-year flood plain foreseeably increased the potential for flood damages to Plaintiffs' property.
- 184. Notwithstanding the Corps' knowledge regarding the operation and management of Old Hickory Dam and Reservoir, Defendant failed to use due care in the operation and management of the Dam and Reservoir prior to and during the May 2010 storm event.
- 185. More particularly, Defendant breached its duty to use due care in the operation and management of Old Hickory Dam and Reservoir by, among other things, committing the following acts or omissions constituting negligence:
  - (a) continuing to operate Old Hickory Dam and Reservoir under Normal
    Regulation in advance of and during the May 2010 storm event despite increasingly dire
    forecasts of the massive storm event;
  - (b) failing to implement, adhere to and operate Old Hickory Dam and Reservoir under Flood Regulation in advance of and during the storm despite increasingly dire forecasts of the storm event:
  - (c) failing to preserve storage capacity and/or draw down and create and preserve storage capacity in Old Hickory Reservoir in advance of the forecasted storm event;
  - (d) allowing too much head water to build up behind the Old Hickory Dam in advance of the storm,
  - (e) allowing the head water of Old Hickory Dam to rise to the top of the lock walls prior to the peak of the flood, leaving no option but to suddenly discharge huge

volumes of waters into the Nashville Reach of the Cumberland River to prevent overtopping of the Dam and prevent damage to the powerhouse;

- (f) failing to implement or adhere to Corps regulations, water control plans, water control manuals, and reservoir instructions for the operation of Old Hickory Dam and Reservoir;
- (g) failing to recognize and respond or react to the magnitude of the storm
  event in advance of and during the storm;
- (h) failing to provide required information and data to other agencies of
  Defendant regarding Dam and Reservoir operations and management;
- (i) providing inaccurate data and information and failing to use and exchange proper data and information, and using flawed data and information critical to Defendant's scientific and engineering duties regarding Dam and Reservoir operations and management;
- (j) miscalculating, misapplying and misjudging objective scientific and engineering principles in assessing the hydrological risks, analyzing hydrometeorlogical variables, determining the Reservoir storage capacity needed and when to create that capacity, determining the inflows into the Reservoir, determining the timing and volume of water that could be safely discharged through Old Hickory Dam;
- (k) failing to contact USGS and obtain and/or utilize real-time river gage data during the storm in operating and managing the Dam;
- failing to maintain critical internet connectivity during the storm event and the ability to communicate critical data and information with other offices and agencies in a timely and effective manner regarding discharge releases at Old Hickory Dam;

- (m) failing to have adequate, trained staff on duty during the May 2010 storm event;
- failing to have a water manager on duty during all critical periods during the storm event;
- (o) on information and belief, failing to implement or adhere to the Emergency Action Plan for Old Hickory Dam;
- (p) on information and belief, failing to implement or have in place adequate emergency operating policies and procedures, train personnel and provide necessary authorizations to use computer software program for emergency operations;
- (q) failing to maintain the spillway gates at Old Hickory Dam in good repair and operating condition;
- failing to operate Old Hickory Dam safely so as to not create a threat of loss of life or inordinate property damage;
- (s) failing to operate Old Hickory Dam safely so as to not endanger lives and property downstream from the Dam;
- (t) releasing massive volumes of water through the Dam and into the Nashville Reach of the Cumberland River in such a manner as to cause the river to surge and rise rapidly above the 100-year flood plain and endangering lives and property downstream;
- (u) releasing massive volumes of water in order to protect the Dam structure and the powerhouse in disregard of the safety of lives and property downstream.

#### Negligent Failure to Warn

- 186. Defendant had a duty of reasonable care to disseminate information to warn Plaintiffs and respond to Plaintiffs' inquiries and requests regarding (i) foreseeable river stage levels, (ii) projected river stage levels, (iii) official river stage and flood stage levels during the May 2010 storm event, and (iv) increases in the releases or volume of water being discharged through from its federal dam projects.
- 187. Defendant had a duty of reasonable care to utilize correct and accurate data and information and apply proper scientific principles and engineering judgment in preparing and disseminating river stage forecast information.
- 188. Defendant failed to warn Plaintiffs and disseminate timely updates to its river stage forecasts, projected river stage levels, and known and observed river stage levels as those levels were reached during the May 2010 storm event, in breach of Defendant's duty of care.
  - 189. Defendant had a duty to warn Plaintiffs of known and foreseeable danger.
- 190. Defendant failed to warn Plaintiffs of the danger Defendant had created by its operation and management of Old Hickory Dam and Reservoir prior to and during the May 2010 storm event, in breach of its duty of care owed to Plaintiffs. Plaintiffs relied upon Defendant to provide information regarding the flow of the waters of the Cumberland River, including but not limited to, information regarding river stage forecasts.
- 191. The rapid and massive deluges of water discharged by the Corps at Old Hickory and dumped into the Nashville Reach of the Cumberland River created a man-made, dangerous condition that inundated the Nashville Reach, causing excessive flooding above the 100-year flood plain level and causing devastating damages to Plaintiffs.

- 192. But for Defendant's negligence and gross negligence in creating a man-made dangerous condition in the Nashville Reach of the Cumberland River, the May 2010 storm event would have been an endurable, natural event within the 100-year flood plain.
- 193. With adequate warning of these events, Plaintiffs could have taken earlier action to evacuate people and move property to higher ground that was placed at risk by the Corps' man-made disaster.
- 194. As a direct and proximate result of Defendant's negligent acts and omissions described above, Plaintiffs lost critical time in moving their personal property, equipment and inventory to higher ground and out of the way of the rising Cumberland River and suffered enhanced damages.
- 195. As a direct and proximate result of the Corps' negligent dumping of unprecedented and massive amounts of water into the Nashville Reach of the mainstem of the Cumberland River, causing a man-made, dangerous condition, Plaintiffs were inundated with water that rose well above the 100-year flood plain causing catastrophic injuries, losses and damages.

## Negligent Failure to Exchange Data and Information

- 196. Defendant's agencies have a duty to exchange complete and accurate meteorological and hydrological data and information.
- 197. Notwithstanding the Corps' and the NWS' respective missions, duties, undertakings and responsibilities to, among other things, coordinate, cooperate and communicate in the collection, analyses and exchange of meteorological and hydrological data and information, the Corps and the NWS carelessly neglected to do so prior to and during the May 2010 storm event.

- 198. The Corps failed to provide required daily reports, information and data upon which NWS relied to prepare official forecasts during the May 2010 storm event.
- 199. The Corps repeatedly neglected to notify or update the NWS of the huge increases in discharges through Old Hickory Dam so as to allow NWS to revise its forecasted river stage at Nashville.
- 200. The Corps failed to provide the NWS with timely, updated discharge information as that data changed for purposes of the NWS hydrologic forecast modeling. The Corps and NWS failed to increase the frequency of their communications.
- 201. The Corps repeatedly provided incorrect and inaccurate information to the NWS, including inaccurate and grossly understated project release data, knowing that the NWS relied on that data and information to prepare official forecasts.
- 202. The Corps' daily reports of release projects for Old Hickory Dam did not include forecasted precipitation amounts.
- 203. The NWS knowingly used outdated information received from the Corps in preparing its official forecasts.
- 204. The Corps failed to read and respond timely to an advanced message sent via electronic mail from the Corps Ohio River Division Water Management issuing a "Flood Potential Update" regarding increases in the flood forecast, resulting in slowed internal communications within the Corps chain of command regarding the severity of the storm event.
- 205. The Corps and NWS failed to resolve the wide discrepancies in the projected river stage levels and despite that discrepancy, the NWS used Corps forecast data and did not publish its own, more extreme and ultimately more accurate forecast, and as a result, disseminated inaccurate river stage level forecasts.

- 206. The Corps failed to increase the frequency of communications with the NWS during the May 2010 storm event and failed to answer telephone calls from the NWS seeking updated data.
- 207. The Corps lost internet connectivity for many hours during an extended and critical period of time on Sunday, May 2, and its failure to maintain critical lines of communication during the May 2010 storm event disrupted and interfered with the ability of the Corps' Nashville District office to timely exchange required and updated data and information.
- 208. The Corps and NWS failed to have a comprehensive understanding of each other's operational procedures, forecast processes, and critical data needs during the May 2010 storm event. For example, the NWS did not know or understand that the Corps' daily project release projections, data used by the NWS in preparing official forecasts, was limited to observed rainfall during the past 24-hour period, or "rain on the ground" and failed to include forecasted precipitation amounts in the projected release data.
- 209. Defendant's careless failure to exchange required data and information timely, maintain adequate communications and communications equipment, seriously disrupted and impacted Defendant's ability to timely and effectively communicate accurate data and information critical to the evaluation and assessment of the hydrological conditions and water management and causally contributed to Plaintiffs' damages.

## Additional Facts Pertaining to Plaintiff A. O. Smith

- 210. A. O. Smith is one of the world's leading manufacturers of residential and commercial water-heating equipment with annual sales in 2010 of approximately \$1.49 billion.
- 211. A. O. Smith operates the world's largest residential and commercial water heater manufacturing facility at its Ashland City Plant.

- 212. A. O. Smith's Ashland City Plant is located near the Nashville Reach of the Cumberland River, downstream from Nashville and upstream from the Cheatham Dam.
- 213. At the time of the May 2010 storm event, approximately 835 employees worked at its Ashland City Plant and produced approximately 5,500 water heaters per day.
- 214. On Saturday, May 1, 2010, A. O. Smith's plant managers became concerned about the heavy rains and began closely monitoring the rainfall situation. During the afternoon hours, the main parking lot at the Ashland City Plant experienced some flash flooding due to rainfall runoff. However, by 4:30 p.m., the flash flood waters had receded from the parking lot and there was no flooding in the fields adjacent to the plant closest to the Cumberland River.
- 215. By approximately 1:45 a.m. on the following day, Sunday, May 2, water from the Cumberland River was rising and had reached the Ashland City Plant guard house, which is the lowest lying structure at the Ashland City facility and is located at approximately 392.4 feet above sea level.
- 216. By 5:00 a.m. on Sunday, May 2, 2010, the Ashland City Plant managers became increasingly concerned about the heavy rains and rising water and attempted to reach the Corps' Nashville District office to get updated information including the Corps' forecast as to how high the waters were expected to rise. There was no answer at the Corps.
- 217. At about 6:30 a.m. on Sunday, the Ashland City Plant managers were able to reach the Corps' attendant at Cheatham Dam located downstream from the Ashland City Plant. The lock attendant provided the then-current level of the waters of the Cumberland River, but was unable to provide any information as to future levels or river crests.

- 218. Later that morning, A. O. Smith's plant managers obtained an updated prediction for river crest levels from Defendant, which predicted that the Cumberland River would crest at approximately 398 feet, which is below the 100-year flood plain at the Ashland City Plant.
- 219. At that time, A. O. Smith made the decision to implement the Ashland City Plant's established flood plan for a 100-year flood event, which included evacuating the plant's employee parking lots and relocating component parts (water heater tanks) and other movable equipment and personal property temporarily stored in areas below the 100-year flood mark.
- 220. As the day progressed on Sunday, the water rose past the 398 feet level. By 4:00 p.m. on Sunday, May 2, A. O. Smith management instructed all of its non-key personnel to leave the facility due to the rising waters.
- 221. By approximately 8:30 p.m. on Sunday, May 2, water from the rising Cumberland River began flowing into A. O. Smith's main manufacturing plant, distribution center, and general office, all of which are located at approximately 402.5 feet above sea level and above the 100-year flood plain. The waters continued to rise throughout the night.
- 222. As of Sunday, May 2, A. O. Smith's Ashland City Plant was completely shut down because of the inundation of water from the Cumberland River.
- 223. When the Cumberland River crested on Monday, May 3 at 6:00 p.m., A. O. Smith's entire Ashland City Plant, including all of its buildings and grounds, was submerged in five to ten feet of muddy water. The main manufacturing facility was submerged in approximately five feet of water. Photographs of the Ashland City Plant are attached hereto as Collective Exhibit D.
- 224. A. O. Smith took immediate action to redistribute its water heater production and distribution activities to other A. O. Smith facilities in North America.

- 225. A. O. Smith was not able to regain access to the main floor of its Ashland City Plant facility until about May 10, 2010, when the waters receded at the main plaint. At that point, A. O. Smith first discovered the extent and magnitude of the damages to its facilities.
- 226. Everything at the Ashland City Plant that had been underwater was covered in thick mud and silt. Raw materials, inventory, finished product, equipment, and machinery were strewn throughout the facility, and were heavily damaged or destroyed. The waters of the Cumberland River carried volumes of debris into the facilities and property. A. O. Smith's buildings, including the main plant's first floor offices, suffered significant damages. Over one week later, as of May 10, three (3) feet of water remained in the Ashland City Plant's machine press room.
- 227. A. O. Smith suffered catastrophic damages as a result of the May 2010 storm event to the extent the waters of the Cumberland River exceeded the 100-year flood plain. A. O. Smith estimates those damages as follows: over \$16 million in loss of inventory; more than \$36 million in equipment loss and damage; more than \$14 million in site clean-up and restoration expenses; approximately \$10 million in operational costs due to inefficiencies from redistributing the Ashland City Plant's production and distribution to other A. O. Smith facilities in North America, and loss of profits, customers and goodwill.

# Additional Facts Pertaining to Plaintiffs Gaylord Companies

- 228. Gaylord's properties are located along the Nashville Reach of the Cumberland River, downstream from the Old Hickory Dam and upstream from downtown Nashville.
- 229. On Saturday, May 1, 2010, Gaylord maintained normal operations of its multiple properties and businesses, including the Opryland Hotel, the Grand Ole Opry complex, the

General Jackson and Music City Queen Showboats and its satellite Nashville properties, the Wildhorse Saloon and Gaylord Springs Golf Club, throughout the day.

- 230. Gaylord began monitoring NWS official reports on projected river stages for the Cumberland River on Saturday, May 1.
- 231. Sandwiched between the Cumberland River and the Gaylord properties at its Opryland complex is a levee system. The lowest point of the levee system is at or above the 100-year flood plain or approximately 422 feet above sea level (48 feet river stage elevation). The forecasted river stage for the Nashville Reach of the Cumberland River as of Saturday, May 1, did not come close to 422 feet elevation.
- 232. Gaylord continued to monitor the forecasted river stages through the day on Sunday, May 2, beginning at 5:00 a.m.
- 233. During the late morning or early afternoon on Sunday, May 2, Gaylord executives, engineers, and other personnel began having conference calls regarding the rising waters of the Cumberland River at Gaylord's properties and Gaylord's response.
- 234. Shortly before 11:00 a.m. on Sunday, May 2, Gaylord obtained an updated river crest prediction of 413 feet from the NWS.
- 235. Beginning around noon on Sunday, May 2, Gaylord began to scale back and/or close operations at its satellite properties and on the Opryland complex. Gaylord closed the Wildhorse Saloon and cancelled Showboat cruises. At about 4:00 p.m., Gaylord stopped taking new reservations and guest check-ins at the Opryland Hotel and began making arrangements for alternative lodging for its guests.
- 236. As conditions continued to worsen, Gaylord began making plans to evacuate its current guests.

- 237. At about 3:00 p.m. on Sunday, May 2, Gaylord reached the Metropolitan Nashville Office of Emergency Management (Nashville OEM) and was told by the Metro Fire Chief that the NWS river crest forecast, which had not been issued to the public or provided to Plaintiffs, had been increased to 418 feet at Opryland, only 4 feet below the top of Gaylord's levee system.
- 238. At about 6:00 p.m. on Sunday, May 2, Gaylord evacuated all hotel guests to the Presidential Ballroom of the Opryland Hotel. The NWS river stage forecast at that time was still below the top of Gaylord's levee system.
- 239. Between 6:00 p.m. and 6:30 p.m., Gaylord personnel walked along the top of its levee system to monitor the situation. Gaylord discovered that the Cumberland River had already risen near the top of Gaylord's levee.
- 240. Due to its recognition of the imminent danger of Gaylord's levee system being overtopped and the risk of loss of lives, Gaylord made the decision to evacuate all hotel guests between 7:00 and 8:00 p.m. on Sunday night. Gaylord informed Nashville OEM of its decision. Gaylord used its own buses to transport approximately 1,500 people to an evacuation location between 8:00 and 9:00 p.m. on Sunday night.
- 241. After 8:00 p.m. on Sunday, Gaylord reached a Corps representative, who advised that the only thing Gaylord could do to get assistance was to file a "flood fight" with the Tennessee Emergency Management Agency (TEMA). Gaylord made such a request to TEMA later on Sunday and was told the federal government would respond the next day.
- 242. Between 11:00 p.m. and midnight on Sunday, the Cumberland River overtopped the Gaylord levee system and the waters breached multiple buildings on the Opryland complex, including the Opryland Hotel and the Grand Ole Opry.

- 243. By the time the Cumberland River crested on Monday, May 3, 2010 at 6:00 p.m., significant portions of the Opryland Hotel and other properties were submerged in muddy water filled with debris. Photographs of the Gaylord property are attached hereto as Collective Exhibit E.
- 244. All of the Opryland Hotel's conservatories and atria were partially submerged in muddy water. The Opryland Hotel's extensive service tunnel system that runs underneath the Hotel and houses administrative offices as well as computer and electronic equipment was completely submerged. Over 100 guest rooms and various exhibit halls sustained extensive water damage. The Hotel's laundry facility and powerhouse, containing the mechanical, electrical and power systems, was also submerged under five to ten feet of muddy water.
- 245. In addition to all of the damage to its buildings, property and equipment, the Opryland Hotel remained closed for approximately six months and had to cancel reservations and bookings during that time frame. Gaylord suffered losses of revenues during this extended closure period.
- 246. Gaylord was also forced to release from its employment temporarily a substantial number of Opryland Hotel staff due to the closure. Gaylord eventually was able to rehire a portion of those employees when it reopened.
- 247. The Grand Ole Opry complex also sustained substantial damages. Water breached the Opry House and settled approximately four feet above the famed Grand Ole Opry stage. The waters destroyed the backstage area, including electronic and other equipment used during the shows held at the Opry House. The waters badly damaged the well-known backdrop for the Opry stage as well as the pews that sit on the Opry stage and the instruments of the musicians who perform at the Opry.

- 248. The Acuff Theater, WSM (Opry Radio Station) building, the Gaslight Theater and other buildings on the Opry complex were also heavily damaged beyond repair and had to be torn down. The Opry Museum, while still standing, had to be shuttered. The lower level and approximately 5 feet of the main level of the Acuff House were submerged under muddy water. The Pearl Building, which housed country music memorabilia and offices, was submerged under 10 feet of water and the first floor of the building now lies abandoned.
- 249. The General Jackson and Music City Queen Showboats sustained significant damages at the ticketing area and offices, which were submerged in 5 to 10 feet of muddy water. The first floor of the large building that supported events held on the Showboats and housed additional office space was completely inundated with muddy water. Both Showboats suffered decreases in guests and lost revenues in the following months.
- 250. The Wildhorse Saloon located in downtown Nashville sustained significant damages to its kitchen and other facilities located in the basement of the building. The Wildhorse Saloon was closed for over one month.
- 251. The Gaylord Springs Golf Course sustained damages to its buildings as well as to the golf course itself that required extensive repair and renovations.
- 252. As a direct and proximate result of Defendant's negligence and/or gross negligence, Gaylord suffered extensive damages, of at least \$250 million, including the following: clean up costs as well as remediation and construction costs, equipment losses and damages, buildings that could not be rebuilt, inventory losses, business interruption damages and loss of profits, reopening expenses, and damages to country music memorabilia, photograph and instrument collections.

#### CLAIMS FOR RELIEF

#### Count I - Negligence

- 253. The allegations set forth hereinabove are realleged and incorporated herein by reference.
- 254. At all relevant times, Defendant was responsible for the implementation, execution, operation, management, maintenance, procedures, supervision, control, application of scientific and engineering principles, meteorological and hydrological analyses and assessments, exchange of scientific data and river stage forecasting for the Cumberland River, and dissemination of weather warnings and flood warnings.
- 255. Defendant owed a duty to Plaintiffs to adhere to, implement and follow the applicable statutes, regulations, water control plans and manuals and reservoir instructions governing the operations and management of the projects located on the Cumberland River.
- 256. Defendant owed a duty to Plaintiffs to exercise due care with respect to the projects located on the Cumberland River and to refrain from negligent acts or omissions in carrying out those responsibilities.
- 257. Defendant owed a duty to Plaintiffs to exercise due care regarding meteorological and hydrological conditions, predictions and forecasting during the May 2010 storm event, and all of the duties described in this complaint and to refrain from negligent acts or omissions in carrying out those responsibilities.
- 258. Defendant owed a duty to Plaintiffs to use due care in the exercise of its scientific and engineering judgment and professional expertise relating to the meteorological and hydrological conditions presented during the May 2010 storm event and to refrain from negligent acts or omissions in carrying out those responsibilities.

- 259. At all relevant times, Defendant knew or should have known that its failure to exercise due care in the performance of its duties and, having undertaken those duties, its failure to warn of life-threatening and dangerous conditions could foreseeably result in devastating harm to Plaintiffs. Plaintiffs relied upon Defendant to provide information regarding the flow of the waters of the Cumberland River, including but not limited to, information regarding river stage forecasts.
- 260. Defendant's conduct, acts and/or failure to act fell below the standard of care owed to Plaintiffs, constituting breaches of those duties.
- 261. Defendant lacked discretion in undertaking these challenged actions, and/or the challenged actions are not grounded in public policy.
- 262. Plaintiffs suffered catastrophic injuries and losses to their real property, personal property, and business operations as a result of the negligent acts and omissions of Defendant.
- 263. The risk of harm to Plaintiffs and the ensuing harm actually suffered by Plaintiffs was reasonably foreseeable.
  - 264. Each Plaintiff has complied with all conditions precedent to bringing this action.
- 265. Old Hickory Dam and Cheatham Dam, located on the Cumberland River and operated by the Corps, were authorized, funded and built for power generation and navigation, and not as flood control projects.
- 266. Defendant's negligent acts and omissions were such that the United States and its agencies, if private persons, would be liable to Plaintiffs in accordance with the laws of the State of Tennessee where the negligent acts and omissions occurred.
- 267. The injuries and damages suffered by Plaintiffs were caused in fact by Defendant's negligent acts and omissions.

- 268. The injuries and damages suffered by Plaintiffs were proximately caused by Defendant's negligent acts and omissions.
- 269. As a foreseeable, direct and proximate cause of Defendant's negligence, Plaintiffs suffered significant damages, including: loss of personal property; damage to real property; diminution in value of real and personal property; costs of repair, restoration and renovation of real and personal property; loss of business income and profits; loss of business, customers and goodwill; interruption in business operations; costs of this lawsuit; and attorneys' fees.

#### Count II - Gross Negligence

- 270. The allegations set forth hereinabove are realleged and incorporated herein by reference.
- 271. At all relevant times, Defendant was responsible for the implementation, execution, operation, management, maintenance, procedures, supervision, control, application of scientific and engineering principles, meteorological and hydrological analyses and assessments, exchange of scientific data and river stage forecasting for the Cumberland River, and dissemination of weather warnings and flood warnings.
- 272. Defendant owed a duty to Plaintiffs to adhere to, implement and follow the applicable statutes, regulations, water control plans and manuals and reservoir instructions governing the operations and management of the projects located on the Cumberland River.
- 273. Defendant owed a duty to Plaintiffs to exercise due care with respect to the projects located on the Cumberland River and to refrain from negligent acts or omissions in carrying out those responsibilities.
- 274. Defendant owed a duty to Plaintiffs to exercise due care regarding meteorological and hydrological conditions, predictions and forecasting during the May 2010 storm event, and

all of the duties described in this complaint and to refrain from negligent acts or omissions in carrying out those responsibilities.

- 275. Defendant owed a duty to Plaintiffs to use due care in the exercise of its scientific and engineering judgment and professional expertise relating to the meteorological and hydrological conditions presented during the May 2010 storm event and to refrain from negligent acts or omissions in carrying out those responsibilities.
- 276. At all relevant times, Defendant knew or should have known that its failure to exercise due care in the performance of its duties and, having undertaken those duties, its failure to warn of life-threatening and dangerous conditions could foreseeably result in devastating harm to Plaintiffs. Plaintiffs relied upon Defendant to provide information regarding the flow of the waters of the Cumberland River, including but not limited to, information regarding river stage forecasts.
- 277. Defendant's conduct, acts and/or failure to act fell below the duties of care owed to Plaintiffs, constituting breaches of those duties.
- 278. Defendant's negligent acts or omissions were done with reckless disregard or conscious indifference for the risks of harm to the rights and property of Plaintiffs and, therefore, constitute gross negligence.
- 279. Defendant lacked discretion in undertaking these challenged actions, and/or the challenged actions are not grounded in public policy.
- 280. Plaintiffs suffered catastrophic injuries and losses to their real property, personal property, and business operations as a result of the grossly negligent acts and omissions of Defendant.

- 281. The risk of harm to Plaintiffs and the ensuing harm actually suffered by Plaintiffs was reasonably foreseeable.
  - 282. Each Plaintiff has complied with all conditions precedent to bringing this action.
- 283. Old Hickory Dam and Cheatham Dam, located on the Cumberland River and operated by the Corps, were authorized, funded and built for power generation and navigation, and not as flood control projects.
- 284. Defendant's grossly negligent acts and omissions were such that the United States and its agencies, if private persons, would be liable to Plaintiffs in accordance with the laws of the State of Tennessee where the negligent acts and omissions occurred.
- 285. Defendant's grossly negligent acts and omissions were such that the United States and its agencies, if private persons, would be liable to Plaintiffs in accordance with the laws of the State of Tennessee where the negligent acts and omissions occurred.
- 286. The injuries and damages suffered by Plaintiffs were caused in fact by Defendant's grossly negligent acts and omissions.
- 287. The injuries and damages suffered by Plaintiffs were proximately caused by Defendant's grossly negligent acts and omissions.
- 288. As foreseeable, direct and proximate causes of Defendant's gross negligence, Plaintiffs suffered significant damages, including: loss of personal property; damage to real property; diminution in value of real and personal property; costs of repair, restoration and renovation of real and personal property; loss of business income and profits; loss of business, customers and goodwill; interruption in business operations; costs of this lawsuit; and attorneys' fees.

#### Count III - Trespass

- 289. The allegations set forth hereinabove are alleged and incorporated herein by reference.
- 290. The excessive waters accumulated and intentionally discharged through the gates of Old Hickory Dam by the Defendant during the May 2010 storm event physically invaded Plaintiffs' property and land, constituting a trespass.
- 291. This unauthorized intrusion was a substantial and unreasonable interference with Plaintiffs' exclusive possession of their properties.
- 292. Defendant's wrongful acts were such that the United States and its agencies, if private persons, would be liable to Plaintiffs in accordance with the laws of the State of Tennessee where the trespass occurred.
- 293. The trespass caused significant damage, depriving Plaintiffs of the use of their property and resulting in extensive property damage.
- 294. As a foreseeable, direct and proximate result of this trespass, Plaintiffs suffered significant damages, including: loss of personal property; damage to real property; diminution in value of real and personal property; costs of repair, restoration and renovation of real and personal property; loss of business income and profits; loss of business, customers and goodwill; interruption in business operations; costs of this lawsuit; and attorneys' fees.

#### Count IV - Private Nuisance

295. The allegations set forth hereinabove are alleged and incorporated herein by reference.

- 296. The excessive waters accumulated and intentionally discharged through the gates of Old Hickory Dam by the Defendant during the May 2010 storm event physically invaded Plaintiffs' property and land, creating and constituting a private nuisance.
- 297. The discharged waters resulted in a substantial and unreasonable interference with the use and enjoyment of Plaintiffs' land and property. The waters inundated large portions of Plaintiffs' land and property and caused substantial physical and economic damage.
- 298. The invasion of Plaintiffs' interest in the private use and enjoyment of their land and property was proximately caused by Defendant's storage and intentional discharge of waters through the Old Hickory Dam.
- 299. Defendant's wrongful acts were such that the United States and its agencies, if private persons, would be liable to Plaintiffs in accordance with the laws of the State of Tennessee where the nuisance occurred.
- 300. As a foreseeable, direct, and proximate result of this private nuisance, Plaintiffs suffered significant damages, including: loss of use and enjoyment of their property; considerable cost in restoring their property to its condition prior to the inundation; a substantial interruption in business operations; loss of business income and profits; loss of business, customers and goodwill; inconvenience damages; costs of this lawsuit; and attorneys' fees.

### RELIEF REQUESTED

WHEREFORE, Plaintiffs respectfully request the entry of judgment against Defendant and that the following relief be granted:

- A. Awards of all compensatory and economic damages sustained by each Plaintiff in amounts to be determined at the trial of this cause;
  - B. Awards of interest as to each Plaintiff to the extent allowed by law;

- C. Awards of attorneys' fees and costs of litigation pursuant to the FTCA and/or Equal Access to Justice Act;
  - D. Awards of discretionary costs; and
  - E. Such other and further relief as the Court deems just and appropriate.

Respectfully submitted.

By:

Robert S. Patterson (BPR #6189)

bpatterson@babc.com

Patricia Head Moskal (BPR #11621)

pmoskal@babc.com

BRADLEY ARANT BOULT CUMMINGS LLP

1600 Division Street, Suite 700

P.O. Box 340025

Nashville, TN 37203

Telephone: (615) 252-2335

Attorneys for Plaintiffs